COMPUTER ASSISTED SUSTAINABILITY TESTING

Field Of The Invention

The present invention relates to the field of product evaluation by consumers. More particularly, the

5   invention provides a system and method for determining consumer preferences and product longevity over a distributed network such as the Internet.

Background Of The Invention

10   It is well known to survey customers in order to refine and improve products, and more specifically, sustainability testing of new products is well known. For example, United States Patent No. 5,090,734 (the "'734 patent"), issued to the inventor of the present

15   application, teaches a product testing method characterized as a product attribute and repeat test ("PAR"). The disclosure of the '734 patent is hereby incorporated by reference in full.

To briefly summarize the '734 patent, a method is

20   provided to evaluate consumer goods by selecting a plurality of test panel members to receive a set of test materials from a source. An evaluation is conducted by providing each test panel member with the set of test

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materials over several cycles or "waves," so that product

preferences and purchasing trends can be evaluated over

time.   In the context of snack food evaluation, the test

materials comprise a set of food products to be evaluated

5   by the consumer (an "evaluation set"), a video tape

containing a video presentation on each food product in

the evaluation set, and means for ordering one or more

food products (of the panel member's choosing) from the

evaluation set.   The evaluation set of food products may

10   comprise a number of subsets; a set of experimental or

test food products being evaluated (the "test set"), and

a set of currently-marketed commercial food products (the

"market set") which the test panel member will already be

familiar with.

15   The product evaluation process is carried out in a

plurality of cycles or "waves."   In the first cycle (the

"base wave") the test panel receives information

regarding and means for ordering products from an

evaluation set comprising only the market set.   In

20   subsequent waves, the test panel member receives

information and means for ordering products from an

evaluation set consisting of the union of the market set

and the test set.   Samples of the test set products may

be included among the test materials provided to the test

25   panel member during these subsequent waves.

Each panel member is instructed to respond to the test by sampling the test food products and to utilize the ordering means to order a stated number of food products from the evaluation set. A panel member's food

5   product preferences are evaluated by recording the identity of the food products ordered in response to each wave of the test. The products ordered during the base wave provide baseline data regarding the test panel members preferences. The products ordered during

10   subsequent waves reflects the ability of the test products to "win over" the consumer and succeed in the competitive marketplace.

However, known sustainability testing techniques, such as the above described method, are relatively

15   expensive to perform because the testing lasts for an extended period. For example, as described above, a sustainability test generally requires extended activity by the testing company so that the product is tested through several waves. This extended activity is needed

20   because the testing looks at changes in consumer opinions over time.

Furthermore, the known methods for sustainability testing require active participation by test subjects over an extended period, making compliance in the study

25   difficult for the consumers. The sustainability testing

results can be skewed if consumers only partially comply with the testing parameters.

Another shortcoming to currently employed sustainability testing methods is the necessity to change the distribution flow for the test product. For example, the test product is typically limited to a small test area under controlled conditions to preserve the accuracy of the test, and therefore, a product under testing can only be provided to specific stores in specific areas. As a result, traditional sustainability tests require the creation of a special distribution system for the test product. This complicates business operations, and a more desirable testing method would employ existing infrastructures to make the testing more simple to execute.

Also, sustainability testing techniques have not been adapted to test online customers. Online business or "e-commerce" represents a rapidly growing segment of the economy.

Traditionally, vendors have presented product information to consumers through printed catalogs. The printed catalogs contained images and descriptions of the vendors' items, as well as information on how to purchase the items from the vendor. Through advancement in technology, it has recently become possible to display images and product information over a distributed

network, such as the Internet, in the form of an electronic catalog.

An online catalog is an electronically stored collection of product information. The product
5   information is then provided to customers over a distributed network so that the customers may access the product information from afar. For example, product information may be electronically mailed to the customers.
10   Typically, an electronic catalog sends the product information to customers through a series of "client-server" transactions. The client-server model of interaction in a distributed network is a system in which a program at one site sends a request to a program at
15   another site and waits for a response. The requesting program is called the "client," and the program that responds to the request is called the "server." In the context of the World Wide Web (discussed below), the client is a "Web browser" (or simply "browser") which
20   runs on a computer of a user; the program which responds to browser requests by serving Web pages is commonly referred to as a "Web server." The web server is said to "serve" the client by transmitting data over the network to the user's computer for viewing through the browser.
25   Upon establishing a connection to the distributed network, the browser is assigned a unique set of numbers

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"**C**" that identify the client. The server also has a

unique identifying set of numbers "**S**." Furthermore, each

page of information has a unique identifier "**P**."

Accordingly, a request from the browser to the server is

5   generally in form of: server **S**, please send information **P**

to client **C**. The request may be routed through the

network using the server's identifier **S**. Alternatively,

every server throughout the network may receive the

message, with only server **S** replying to the request. The

10   server **S** then responds to the request by sending out

information **P** to client **C**. Again the information **P** may

be sent only to client **C** by routing the information **P**

through the network or the information **P** may be

transmitted throughout the network with only client **C**

15   accepting the information.

The data served from the client to the server is

interpreted by the browser to form a webpage that

displays the data for easier use by the user. A webpage

typically contains at least one "hyperlink," a

20   navigational link from one document to another, or from

one portion (or component) of a document to another.

Typically, a hyperlink is displayed as a highlighted word

or phrase that can be selected by clicking on it using a

mouse to jump to the associated document or documented

25   portion. Hyperlinks are used to form a series of

connected webpages in a "hypertext System," a
computer-based informational system in which documents
(and possibly other types of data entities) are linked
together via hyperlinks to form a user-navigable "web."

The terms World Wide Web (hereafter "Web") is used
herein to refer generally to both (i) a distributed
collection of interlinked, user-viewable hypertext
documents (commonly referred to as Web documents or Web
pages) that are accessible via the Internet, and (ii) the
client and server software components which provide user
access to such documents using standardized Internet
protocols. Currently, the primary standard protocol for
allowing applications to locate and acquire Web documents
is HTTP, and the Web pages are encoded using HTML
(discussed below). However, the terms "Web" and "World
Wide Web" are intended to encompass future markup
languages and transport protocols which may be used in
place of (or in addition to) HTML and HTTP.

The largest component of the Web is the Internet, a
collection of interconnected (public and/or private)
networks that are linked together by a set of standard
protocols (such as TCP/IP and HTTP) to form a global,
distributed network. While this term is intended to
refer to what is now commonly known as the "Internet," it
is also intended to encompass variations which may be

made in the future, including changes and additions to existing standard protocols.

In the context of a server-client interaction, a website is a computer system that serves informational content over a network using the standard protocols of the World Wide Web. Typically, a website corresponds to a particular Internet domain name, such as "www.fritolay.com," and includes the content associated with a particular organization. As used herein, the term is generally intended to encompass both (i) the hardware/software server components that serve the informational content over the network, and (ii) the "back end" hardware/software components, including any nonstandard or specialized components, that interact with the server components to perform services for Web site users.

An online document, such as a catalog, can be identified and found using its Uniform Resource Locator (URL), a unique address which fully specifies the location of a file or other resource on the Internet. The general format of a URL is protocol://machine address:port/path/filename. The port specification is optional, and if none is entered by the user, the browser defaults to the standard port for whatever service is specified as the protocol. For example, if HTTP is

specified as the protocol, the browser will use the HTTP
default port of 80.

Hyper-Text Markup Language, or "HTML," is a standard
coding convention and set of codes for attaching
5   presentation and linking attributes to informational
content within documents. HTML 4.0 is currently the
primary standard used for generating Web documents, but
it should be appreciated that new versions of HTML are
constantly being developed to accommodate the changing
10   needs of the Web. During a document authoring stage, the
HTML codes (referred to as "tags") are embedded within
the informational content of the document. When the Web
document (or HTML document) is subsequently transferred
from a Web server to a browser at a client, the codes are
15   interpreted by the browser and used to parse and display
the document. Additionally in specifying how the Web
browser is to display the document, HTML tags can be used
to create hyperlinks to other Web documents, as described
above.

20   Hypertext Transport Protocol ("HTTP") is the current
standard World Wide Web client-server protocol used for
the exchange of information (such as HTML documents, and
client requests for such documents) between a browser at
a client and a Web server. HTTP includes a number of
25   different types of messages which can be sent from the
client to the server to request different types of server

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actions. For example, a "GET" message causes the server
to return the document or file located at the specified
URL.

Electronic catalogs thereby allow vendors to present
items to users without incurring printing and mailing
costs, allowing the vendor to reach more users without
increasing costs. Furthermore, online catalogs allow new
customers to locate the vendor and to access a vendor's
product information, thereby allowing the vendor to
market to new users without significant additional costs.
However, businesses have not used online catalogs to
implement sustainability testing.

Summary Of The Invention

It is therefore a goal of the present invention to
provide a methodology for surveying customers over a
distributed network, such as the Internet. The method
produces results for an initial and subsequent waves of a
sustainability test by presenting an item to a user over
a distributed network. Questionnaires can be
administered at the initial or any other subsequent
interaction. The user's response if tallied over a set
amount of time to determine the sustainability of the
product and the products interaction with all other
products being offered. Thereby the results for the
sustainability testing are produced by identifying trends

and changes in the user's responses and answers to the questionnaire.

Brief Description Of The Drawings

5   The features and advantages of the present invention are more fully described in the attached drawings in which corresponding elements are designated by like reference numbers and in which:

FIG. 1 is a flow chart diagram of a method for

10   computer assisted sustainability testing in accordance with an embodiment of the present invention;

FIG. 2 is a flow chart diagram of an exemplary process to present a product in accordance with an embodiment of the computer assisted sustainability

15   testing method of FIG. 1;

FIG. 3a-b are flow chart diagrams of exemplary processes to present a questionnaire in accordance with embodiments of the computer assisted sustainability testing method of FIG. 1;

20   FIG. 4 is an illustration of an exemplary questionnaire in accordance with an embodiment of the present invention;

FIG. 5.is a flow chart diagram of an exemplary process to accept and store the user's response to the

questionnaire in accordance with an embodiment of the computer assisted sustainability testing method of FIG. 1.

Detailed Descriptions Of The Invention

The present invention provides for computer assisted sustainability testing ("CAST") over a distributed network such as the Internet. In accordance with the present invention, FIG. 1 illustrates a CAST method 10 for surveying customers over a distributed network in order to perform a sustainability test. The CAST method 10 according to the present invention involves the steps of (1) presenting the product to a user through a distributed network, box 100; (2) presenting a choice of purchase and/or a questionnaire to that user in response to the user's selection of the product, box 200; (3) accepting and storing the user's responses to the purchase and/or questionnaire, box 300; (4) repeating the previous steps in boxes 100, 200, and 300 as needed to obtain results for a sustainability test, box 400; and (5) comparing the user's first response to the user's subsequent responses, box 500. The individual steps on the CAST method 10 are now described in greater detail.

The first step of the CAST method 10 is to present the test product to a user through a distributed network such as the Internet, box 100. As previously described,

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online catalogs are well known in the art, and the test
product may be presented to the user through a series of
client-server transactions. A typical online data
transfer of product information using client-server

5   transactions is briefly summarized in FIG. 2. To begin
the process, information on the test product is
electronically stored on a storage device such as a hard
drive or CD-ROM or in computer memory such as RAM/EPROM,
box 110. As part of this step, a server is

10   electronically connected for access to the stored product
information. The storage device may be directly
connected to the server, or the server may have access to
an independently located storage device. For example,
the server may access stored information over a

15   distributed network by requesting the information from a
second server. In this way, information may rapidly
cascade through a distributed network, even if the
information was originally located in only a single
location. The server then provides the stored product

20   information over a distributed network while serving the
contents of the online vendor's website to the user's
browser.

The user then "requests" access to the online
vendor's website by specifying the domain name for the

25   vendor's website through the browser, box 120. The user
may either manually enter the location for the website or

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select a hyperlink that directs the user's browser to the website's domain. For example, it is well known in field of e-commerce to have virtual shopping centers that identify several online vendors and provide hyperlinks to the website for each of the online vendors. The user may then select one of the hyperlinks to be redirected to the website for the desired online vendor.

Upon receiving the user's request for the website, the server transmits data to the browser, box 130, whereby the browser uses the data to form a webpage display, box 140. As described above, the data from the server is generally in the form of HTML codes that specify the appearance for the webpage, along with various designated images and sounds used to complete the "hypermedia" presentation through the user's browser. The webpage for the online vendor generally identifies the vendor and the products carried by the vendor. An online catalog typically lists several products, each of which has a separate hyperlink that specifies a URL containing additional data on the product. The webpage also generally contains several hyperlinks that direct the user to webpages to view more information on the product, such as information on the products of the vendor, to make an order, to submit a question to the vendor, and to view the status of a previously submitted order to the vendor.

The user may then request information on a specific product, box 150. For example, the user may select a hyperlink associated with the product by providing an input designating the specific product, such as clicking on the desired product with a mouse or other similar pointing device. The browser transfers the user's product selection to the server to request additional information on the selected product, box 160. On the Internet, the browser's request for the information is in form of a GET:URL command in HTTP that requests information stored at the specified Web address in the hyperlink.

As before, the server responds to the request from the browser by forwarding through the network the information contained at the specified URL, box 170.

In the present invention, the product information requested by the user may comprise numerous different aspects. For example, the information may be a more detailed description of the product, an image of the product, the pricing for the product, warranty information, instructions to purchase the test product, information on the manufacturer, ratings provided by other users or professional reviewers, comparisons to related products, etc.

Once the user has selected the test product in the step of box 100, a questionnaire is presented to the

user, box 200. The questionnaire may be included as part
of the data stored at the URL associated with the test
product on the online catalog. In this case, the browser
receives the questionnaire as part of the HTML data sent
5   from the server to the user's browser. When the browser
forms a webpage with the data from the server, the
questionnaire is presented to the user by the browser
along with the product information. The process is
summarized in FIG. 3a, in which the browser forwards the
10   user's selection of the product to the server via the
distributed network, box 210. The server receives and
processes the user's selection, box 220, and then, the
server responds to the request by automatically
transmitting the data for forming the questionnaire to
15   the user through the distributed network, box 280. The
user's browser receives the data and forms the
questionnaire for viewing by the user, box 290.

Similarly, the server may redirect the user to a
second location that contains the questionnaire.
20   Selection of the test product may result in the user
being redirected to a separate website containing the
questionnaire. The first server accesses and obtains the
questionnaire information from the second server on the
network, and then forwards the information to the user's
25   browser. This process is summarized in FIG. 3b. As part
of this process, the browser forwards the user's

selection of the product to the server through the
distributed network, box 210.   Then the server receives
and processes the user's selection, box 220, and forwards
the user's selection to a second server, box 230.   In

5   effect, the first server acts as a client that requests
the transmission of data by the second server in the form
of a GET command in HTTP.   The second server receives and
processes the user's selection, box 240, and then can
respond to the request by automatically transmitting the

10   data for forming the questionnaire through the
distributed network, box 250.   At this point, the second
server forwards the data for forming the questionnaire
either to the first browser, box 260, or directly to the
user's browser, box 280'.   If the questionnaire data is

15   first forwarded to the first server, then the first
server transmits the data for forming the questionnaire
to the user through the distributed network, box 280.   In
either case, the user's browser receives the data and
forms the questionnaire, box 290.   All of these processes

20   occur as described above through the typical server-
client transactions.

The questionnaire may appear as a series of separate
questions, where the browser presents each question and
returns the user's response to the server to initiate a

25   subsequent question.   In effect, each question is then a
separate webpage served from the client-browser, and each

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response is a request from the client for a new question
from the server. In this way, a questionnaire may be
designed so to minimize reputation and illogical
questions based upon the response to previous questions.
For example, if the user indicates that she is unmarried,
the questionnaire could skip questions about the user's
nonexistent spouse. In this form, the questionnaire is
generally a C program executable that operates on the
server, or other connected computer, to specify the
question to be presented to the user and to process the
user's replies. In this situation, each question
response is a separate variable in the C program and will
be processed and stored accordingly.

Alternatively, the questionnaire may contain several
questions that are presented together to the user. For
example, the questionnaire may be a series of text boxes
with input areas or drop down menus from which the user
may select a desired answer. Once the user has provided
the answers to all of the questions, then the browser
forwards the whole set of the user's answers to the
questionnaire to the server for storage and processing,
as described in more detail below. In this embodiment,
the questionnaire may again be a C program that executes
on the server to forward questions to the user's browser.
In this implementation, the questions and answers are
instead transmitted from the browser simultaneously in a

contiguous block of data. Transferring a set of

questions or a set of responses in a single transaction

over the network is advantageous in comparison to a

series of data transfers over the network because a

5   series of small data transfers over a network takes more

time than a single large data transfer to transmit the

same amount of data. In particular, a time delay occurs

with every data transfer over a network as a connection

is established between the client and server.

10   In an alternative preferred embodiment, the step of

forwarding the questionnaire to the user, box 200, is

accomplished by serving an executable program to the

user's computer. Once the program is received at the

user's computer, the server may store the program or may

15   access the program from another location on the network,

such as a second server. After the program data is

transmitted to and received by the browser, the browser

interprets the data transmitted from the browser to form

the program. The program is typically written in a

20   cross-platform language that can execute through the

browser, such as common gate interface ("CGI")

script/JAVA/PERL applets, so that the program may run on

multiple types of computer and devices. The applet may

run on the browser as part of the displayed webpage.

25   Once the questionnaire program data is received and

compiled by the browser, the program executes through the

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browser so that the questionnaire is presented to the user. Typically, the questionnaire will appear as a separate window, a displayed box on the user's computer in which a program operates, for viewing on a display device connected to the user's computer. The program operates to present the questionnaire and to accept the user's responses to the questions in the questionnaire.

The questionnaire may ask various questions to the user, as needed for the sustainability study. These questions generally relate to the user's opinion of the product and reasons for selecting the product. For example, the user may be asked to provide a numerical rating for the test product, along with identifying/selecting any strengths or weakness to the products. The questionnaire may further inquire for personal information to identify the user and to improve the statistical interpretation of results of the sustainability testing. For example, a user may be asked to provide her zip code or area code, her income level, her age, her ethnicity, etc. An exemplary questionnaire 20 is illustrated in FIG. 4.

In one embodiment, a cookie is assigned to the user's browser. Cookies are informational items stored on the user's computer (typically on the hard drive). The cookies enable a Web server to retrieve information from a user's computer that reveals prior browsing

activities of the user. A cookie is typically a unique

identifier that identifies the user's browser. The

server has a database that stores a record of the online

activities by the identified user at the website. When

5   the user returns to the website, the server can identify

the user through the cookie and then update the database

to include the user's new activities. For example, the

server may store the webpages viewed by the user,

purchases made by the user, personal information

10   previously submitted by the user, etc.

Once the user has completed the questionnaire

regarding the test product, the next step is accepting

and storing the user's responses to the questionnaire,

box 300. As illustrated in FIG. 5, the user's response

15   is first received by the browser, box 310. Upon

receiving the user's response, the browser prepares the

response for transfer back to the server, box 320. The

user's response may be sent to the online vendor for

collection or may be sent directly to the testing

20   company, thereby preventing the online vendor from

accessing the customers' confidential/valuable data.

Therefore, the first server may transfer the user's

response to a second server, box 330. For example, an

online vendor may forward the user's reply to the

25   producer of the test product. In this way, the test may

be performed simultaneously through several sites, with

the result being accumulated and analyzed at a single
site. A manufacturer may provide the test product to
multiple online vendors and collect sustainability
testing results from all of vendor sites, even if the

5   same user purchases the test item from different vendors.

In a preferred embodiment, the user's browser
transmits the response in Extensible Markup Language
("XML") in accordance with the instructions/applet
received from the server. XML is a web language similar

10   to HTML, but the XML is a markup language for describing
data whereas HTML primarily is a markup language for
describing text and picture layouts (hypertext). In
particular, XML is more interactive and well suited for
electronic commerce because the coding contains markers

15   that simplify the standardization and exchange of
information over the Internet. In particular, XML
enables designers to create their own customized tags to
provide functionality not available with HTML. For
example, website designers may create a standard or

20   common way to describe the product (price, size, color,
and so forth) and then describe the product information
with XML.

Once received by the server, the user's responses
are typically stored in a database. The database allows

25   easy access to and analysis of the user's responses.

After the user has completed the questionnaire and the results are received and stored by the server, the process of presenting the product to a user, box 100; presenting a questionnaire to that user in response to

5   the user's selection of the product, box 200; and accepting and storing the user's responses to the questionnaire, box 300 is repeated. The user is generally not asked or required to repeat the test. Instead, the CAST method 100 works passively, so that a

10   questionnaire is presented whenever the test item is selected. If the user again selects the test item and replies to the questionnaire, after having previously selected the test item and replying to the questionnaire, the user's new responses obtained and stored as

15   previously described.

Then sustainability testing is performed on the test product by comparing the user's first questionnaire response to the user's subsequent responses, box 500, to determine changes in the user's perceptions and opinions

20   of the test product. Sustainability testing looks to trends in users' opinions of the test product in order to predict the long term viability of the product.

More specifically, sustainability testing involves multiple waves of testing the same group of test

25   subjects. In this way, sustainability testing evaluates a group's changing opinion of a product as the group

becomes more familiar with the product. This data
provides important information on changing trends in
consumer opinion. For example, consumers may find that a
product, although initially unappealing, may become more

5   liked with increased use. Data showing increasing or
consistently high customer preference for a product after
an extended period of use is a good indicator that the
product will have sustained commercial appeal.
Conversely, testing showing a rapidly decreasing opinion

10   of a product with increasing use is a good indicator that
the product may not be commercially successful.
Accordingly, the CAST method 10 provides a methodology to
easily track changing consumer opinions on a test
product.

15   Sustainability testing is especially valuable in
consumer goods such as snack food products (potato chips,
cookies, snack cakes, nuts, etc.). These types of
products tend to be purchased more than once, thereby
allowing the multiple testing waves needed for the

20   sustainability testing. Also, the composition and taste
of manufactured foods, such as snack products, may be
varied greatly to accommodate changing tastes.
Accordingly, sustainability testing maybe used to track
the results of changes in consumer opinion in the

25   products, even if the changes are minor.

In a sustainability test, consumer data among a
broad, competitive set can be used to determine
switching, allocation, and cannibalization of existing
competitive and noncompetitive products. In this way, it

5   can be determined if a new product will increase profits
or merely cause consumers to switch from existing
products, thereby producing no net increase in sales.
Likewise, the consumer data may be used to determine the
interrelationship between products. For example, a new

10 snack food may reduce the sales of some existing snack
foods, but may increase the sales of dipping sauces.

As part of analysis in step 500, the data collected
through the CAST method 10 may be analyzed using various
known statistical techniques. Many businesses already

15 employ computer programs to analyze data collected from
traditional customer surveys. These same programs may be
used to evaluate the CAST data. Alternatively, numerous
statistical analysis software packages are currently
available, such as SAS, SAS Entriprise Miner, IBM DB2

20 Intelligent Miner, MiniTAB and Sinca'P from Umetrics.

In one embodiment, step 500 of the CAST method 10
further includes the use of a standard panel analysis
package to determine other market effects so that
augmentation or modeling of certain demographic groups

25 may be done as needed. For example, computer users are
more likely to be from urban areas than a random sampling

of consumers. To evaluate the results of a CAST survey,
data relating to the user's geographic location, such as
zip codes information, may be used to check for
geographic balance.

5   In another embodiment, the analysis of the
questionnaire responses in step 500 may be manipulated
using known statistical techniques, such as increasing
the mathematical weight of the lesser represented groups
of consumers. The same testing data may thereby be used
10   in order to achieve more statistically meaningful results
from the CAST method 10. This augmentation or modeling
of the survey data prevents the CAST results from being
skewed if responses are concentrated in certain groups of
consumers, rather than a truly representative sample. In
15   addition to different geographical location, adjustments
may be made to the survey data to accommodate different
levels of income, education, age, gender, race, etc.
Adjustments may also be made for buying patterns such as
heavy or little users, as well as previous product usage.

20   At the same time, any skew results in the data from
the CAST testing provide important information for the
purpose of predicting a product's long term viability.
For example, if a large, commercially important
demographic group consistently ignores a product, the
25   product or its packaging may need to be redesigned to
avoid long-term commercial failure.

Step 500 may further include a comparison of the results from CAST method 10 and traditional sustainability testing that is performed off-line, such as the method of the above-referenced U.S. Patent No.

5   5,090,734. This comparison of online and offline test results gives valuable information about online consumers. In this way, a business new to the Internet may discover the differences between online customers and customer in traditional stores, thereby providing to the

10 business valuable insight into the virtual marketplace, one of the fastest growing segments of the economy.

Overall, the CAST method 10 combines the statistical usefulness of sustainability testing with the efficiencies of access over a computer network. In

15 particular, CAST method 10 achieves the results of known sustainability testing with the efficiencies of online shopping to create a virtual test market. The present invention therefore retains the efficiencies and costs of consumer testing while retaining the benefits of

20 sustainability measures.

Online vendors may employ the CAST method 10 by merely adding the new product to the vendor's site and by polling customers in the above described methods. In the alternative, the producer may provide the test product

25 through third-party, online vendors. In order to encourage online vendors to participate in the CAST

method 10, the test product may be provided exclusively through the online vendors, thereby allowing the online vendors to offer unique products that are not otherwise available to the public. The test product may optionally be provided at no charge to the online vendor. Alternatively, a company may allow the sale of popular existing products through the online vendor in exchange for the online vendor's participation in the CAST method 10. A company testing a product through the CAST method 10 may also offer to share the test results with participating online vendors, thereby sharing the unique insights to online customers discovered through CAST, allowing the online vendors to better serve their customers. Therefore, the CAST method 10 allows a producer to develop partnerships with online Internet vendors.

Using CAST method 10, a test product may be delivered through an existing external infrastructure, thereby making the sustainability test more simple to execute. For example, a product ordered through an online vendor can be delivered through the online vendor's standard delivery protocols.

In an alternative embodiment, several products may be tested together using the CAST method 10. For example, a dipping sauce may be tested along with a particular snack food. The questionnaire is then adapted

to include questions comparing the multiple test products or inquiring into the customer's association of the products. Similarly, the server may not present the questionnaire to the user unless the user selects each of

5   the products under testing. In this way, the CAST method 10 may also allow several business to test their products together to see how the products coexist. This functionality helps the businesses to predict the effectiveness of co-branding and joint marketing.

10   Having described the invention, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit and scope of the invention. Any and all such modifications are intended to be included within the scope of the following

15   claims.